WHAT IS CLAIMED IS:

1. For use in a fusing station of an electrostatographic machine, an elastically deformable fusing-station roller, said fusing-station roller comprising:

a core member, said core member being substantially rigid and having a cylindrical outer surface;

a base cushion layer, said base cushion layer formed on said core member;

a protective layer coated on said base cushion layer;

wherein said base cushion layer is a thermally cured polyorganosiloxane material made by an addition-polymerization of an uncured formulation, said uncured formulation including hollow filler particles in form of microballoons having flexible walls, said microballoons having a predetermined hollow-filler concentration in said uncured formulation, and said uncured formulation further including solid filler particles; and

wherein said addition-polymerization of said uncured formulation is carried out at a temperature below 100°C.

2. The fusing-station roller of Claim 1, wherein said solid filler particles include strength-enhancing filler particles.

3. The fusing-station roller of Claim 2, wherein said strength-enhancing filler particles are members of a group including particles of silica, zirconium oxide, boron nitride, silicon carbide, and tungsten carbide.

4. The fusing-station roller of Claim 2, wherein said fusing-station roller is one of an externally heated fuser roller and a pressure roller, and wherein said strength-enhancing filler particles have a concentration in said uncured formulation in a range of approximately between 15% - 40% by weight.

5. The fusing-station roller of Claim 2, wherein said fusing-station roller is an internally heated fuser roller and wherein said strength-enhancing filler particles have a concentration in said uncured formulation in a range of approximately between 5% - 10% by weight.

6. The fusing-station roller of Claim 1, wherein said solid filler particles include thermal-conductivity-enhancing filler particles.

7. The fusing-station roller of Claim 6, wherein said thermal-conductivity-enhancing filler particles are selected from a group including particles of aluminum oxide, iron oxide, copper oxide, calcium oxide, magnesium oxide, nickel oxide, tin oxide, zinc oxide, graphite, carbon black, and mixtures thereof.

8. The fusing-station roller of Claim 6, wherein said fusing-station roller is one of an externally heated fuser roller and a pressure roller, and wherein said thermal-conductivity-enhancing filler particles have a concentration in said uncured formulation in a range of approximately between 10% - 40% by weight.

9. The fusing-station roller of Claim 6, wherein said fusing-station roller is an internally heated fuser roller and wherein said thermal-conductivity-enhancing filler particles have a concentration in said uncured formulation in a range of approximately between 40% - 70% by weight.

10. The fusing-station roller of Claim 1, wherein said microballoons in said uncured formulation are distinguishable by at least one size.

11. The fusing-station roller of Claim 1, wherein said microballoons in said uncured formulation have diameters of up to approximately 120 μm.

12. The fusing-station roller of Claim 1, wherein said predetermined hollow-filler concentration of said microballoons is in a range of approximately between 0.25% - 3.0% by weight in said uncured formulation.

13. The fusing-station roller of Claim 12, wherein said predetermined hollow-filler concentration of said microballoons is in a range of approximately between 0.5% - 1.5% by weight in said uncured formulation.

14. The fusing-station roller of Claim 1, wherein said addition-polymerization is carried out at a temperature which does not substantially exceed 80°C.

15. The fusing-station roller of Claim 1, wherein said microballoons comprise a polymeric material, said polymeric material polymerized from monomers selected from the following group of monomers: acrylonitrile, methacrylonitrile, acrylate, methacrylate, vinylidene chloride, and combinations thereof.

16. The fusing-station roller of Claim 1, wherein said flexible walls of said microballoons include finely divided particles selected from a group including inorganic particles and organic polymeric particles.

17. The fusing-station roller of Claim 1, wherein said base cushion layer comprises a highly crosslinked polydimethylsiloxane.

18. The fusing-station roller of Claim 17, wherein said fusing-station roller is a fuser roller, said fuser roller being externally heated.

19. The fusing-station roller of Claim 18, wherein:

said fuser roller is provided with an auxiliary internal source of heat; and

said thermal conductivity of said base cushion layer is less than approximately 0.5 BTU/hr/ft/°F.

20. The fusing-station roller of Claim 19, wherein:

said thermal conductivity of said base cushion layer is in a range of approximately between 0.12 BTU/hr/ft/°F - 0.4 BTU/hr/ft/°F.

21. The fusing-station roller of Claim 17, wherein said fusing-station roller is a fuser roller, said fuser roller being internally heated.

22. The fusing-station roller of Claim 21, wherein:

said fusing-station roller is provided with an auxiliary internal source of heat; and

said thermal conductivity of said base cushion layer is in a range of approximately between 0.12 BTU/hr/ft/°F - 0.7 BTU/hr/ft/°F.

23. The fusing-station roller of Claim 22, wherein:

said thermal conductivity of said base cushion layer is in a range of approximately between 0.2 BTU/hr/ft/°F - 0.5 BTU/hr/ft/°F.

24. The fusing-station roller of Claim 17, wherein said fusing-station roller is a pressure roller.

25. The pressure roller of Claim 24, wherein a thermal conductivity of said base cushion layer is in a range of approximately between 0.12 BTU/hr/ft/°F - 0.2 BTU/hr/ft/°F.

26. The fusing-station roller of Claim 17, wherein a thickness of said base cushion layer is in a range of approximately between 0.05 inch - 0.35 inch.

27. The fusing-station roller of Claim 17, wherein said fusing-station roller is one of an externally heated fuser roller and a pressure roller, and wherein a Shore A durometer of said base cushion layer is in a range of approximately between 30 - 50.

28. The fusing-station roller of Claim 17, wherein said fusing-station roller is an internally heated fuser roller, and wherein a Shore A durometer of said base cushion layer is in a range of approximately between 30 - 75.

29. The internally heated fuser roller of Claim 28, wherein said Shore A durometer of said base cushion layer is in a range of approximately between 50 - 70.

30. The fusing-station roller according to Claim 1, wherein said protective layer comprises a chemically unreactive, low surface energy, flexible, polymeric material suitable for high temperature use.

31. The fusing-station roller according to Claim 30, wherein:

said protective layer is a gloss control layer;

a thermal conductivity of said gloss control layer is in a range of approximately between 0.07 BTU/hr/ft/°F - 0.11 BTU/hr/ft/°F; and

a thickness of said gloss control layer is in a range of approximately between 0.001 inch - 0.004 inch.

32. The fusing-station roller of Claim 31, wherein said gloss control layer comprises a fluoropolymer.

33. The fusing-station roller of Claim 32, wherein said fluoropolymer is a random copolymer, said random copolymer made of monomers of vinylidene fluoride (CH_2CF_2), hexafluoropropylene ($CF_2CF(CF_3)$), and tetrafluoroethylene (CF_2CF_2), said random copolymer having subunits of:

—(CH_2CF_2)x—, —($CF_2CF(CF_3)$)y—, and —(CF_2CF_2)z—,

wherein,

x is from 1 to 50 or from 60 to 80 mole percent of vinylidene fluoride,

y is from 10 to 90 mole percent of hexafluoropropylene,

z is from 10 to 90 mole percent of tetrafluoroethylene, and

x + y + z equals 100 mole percent.

34. The fusing-station roller of Claim 33, wherein:

said gloss control layer comprises a particulate filler;

said particulate filler has a particle size in a range of approximately between 0.1 μm - 10 μm;

said particulate filler has a total concentration in said gloss control layer of less than about 20% by weight;

said particulate filler includes zinc oxide particles and fluoroethylenepropylene resin particles;

said zinc oxide particles have a concentration in a range of approximately between 5% - 7% by weight; and

said fluoroethylenepropylene resin particles have a concentration in a range of approximately between 7% - 9% by weight.

35. The fusing-station roller according to Claim 1, wherein said solid filler particles have a mean diameter in a range of approximately between 0.1 - 100 μm.

36. The fusing-station roller according to Claim 35, wherein said solid filler particles have a mean diameter in a range of approximately between 0.5 - 40 μm.

37. For use in a fusing station of an electrostatographic machine, an elastically deformable fusing-station member, said elastically deformable fusing-station member comprising:

a substrate;

a base cushion layer, said base cushion layer formed on said substrate;

a protective layer coated on said base cushion layer;

wherein said base cushion layer is a thermally cured polyorganosiloxane material made by an addition-polymerization of an uncured formulation, said uncured formulation including hollow filler particles in the form of microballoons having flexible walls, said microballoons having a predetermined hollow-filler concentration in said uncured formulation, and said uncured formulation further including solid filler particles; and

wherein said addition-polymerization of said uncured formulation is carried out at a temperature below 100°C.

38. A method of making a fusing-station member for use in a fusing station of an electrostatographic machine, said fusing-station member formed from a substrate, a base cushion layer adhered to said substrate, and a protective layer coated on said base cushion layer, said method comprising the steps of:

mixing of ingredients so as to produce an uncured formulation, said ingredients including: a vinyl-substituted polyorganosiloxane, a silane-substituted polyorganosiloxane, about 1 - 100 parts per million by weight of a platinum curing catalyst, flexible hollow filler particles, strength-enhancing solid filler particles, and thermal-conductivity-enhancing solid filler particles, wherein said flexible hollow filler particles have a concentration in said uncured formulation of about 0.25% - 3% by weight;

degassing said uncured formulation;

contacting said substrate with a thermally curable layer of said uncured formulation, said substrate priorly coated with a uniform coating of an adhesive primer, said contacting coincident with forming said thermally curable layer with a uniform thickness on said substrate;

ramp heating said thermally curable layer and said substrate from a room temperature to an elevated temperature, said elevated temperature not greater than 100°C;

continuing to heat said thermally curable layer and said substrate at a temperature not greater than 100°C until said thermally curable layer is fully cured via an addition-polymerization reaction;

cooling said thermally curable layer and said substrate to a room temperature so as to obtain said base cushion layer as an addition-polymerized layer adhered to said substrate; and

coating said protective layer on said base cushion layer.

39. The method according to Claim 38, wherein said flexible hollow filler particles have an expanded form, said expanded form priorly produced from microspheres having an unexpanded form.

40. The method according to Claim 38, wherein:

said contacting step involves injecting said formulation into a cylindrical mold concentric with a substantially rigid cylindrical core member.